

## CHAPTER 11 LEARNING OBJECTIVES

1. Explain how the kinetic-molecular model explains the motion of particles in gases, liquids, and solids.
2. Explain the terms viscosity, surface tension, and capillary action.
3. Explain how the vapor pressure of a substance changes with temperature.
4. Describe the relationship between the pressure on the surface of a liquid and the boiling point of the liquid.
5. Draw a phase diagram of a substance given appropriate data and use a phase diagram to predict which phases are present at any given temperature and pressure.
6. Define critical temperature, critical pressure, and triple point.
7. Distinguish between crystalline and amorphous solids.
8. Predict the type of solid (molecular, covalent–network, ionic, or metallic) formed by a substance and predict its general properties (Table 11.5).
9. Compare the electronic properties of superconductors, semiconductors, and insulators.

Review the “In Closing” and “Key Terms” sections of Chapter 11 (page 537-538).